# Human Immunology

Official Journal of the American Society
for Histocompatibility and Immunogenetics

Volume 36, 1993

Elsevier

# Human Immunology

## Aims and Scope

*Human Immunology* offers an exchange of information and ideas centering on the immunological system of humans. Pertinent information about the analogous systems of other vertebrates, including fish, birds, and mammals, may also be appropriate. The genes of the major histocompatibility complex and of T, B, and accessory cells and their products as regulatory molecules, disease markers, receptors, or targets are relevant topics. Subdisciplines such as neuroimmunology, immunopharmacology, and developmental and reproductive immunology are also considered insofar as they provide new insights. Limited space is available for reporting technological advances. Rapid publication of newsworthy items is provided by brief reports. Topics of general concern form the basis for editorials and seminar series.


**Editor-in-Chief**
D. Bernard Amos
*Department of Immunology*
*Duke University Medical Center*
*Durham, North Carolina*

**American Editor**
Jeffrey R. Dawson
*Department of Immunology*
*Duke University Medical Center*
*Durham, North Carolina*

**European Editor**
Jon J. van Rood
*Afdeling Immunohaematologie*
*Academisch Ziekenhuis*
*Leiden, The Netherlands*

**Editorial Board**

J. R. Batchelor, *London, England*
H. Betuel, *Lyon, France*
J. G. Bodmer, *London, England*
C. Brautbar, *Jerusalem, Israel*
F. M. Brodsky, *San Francisco, California*
J. D. Capra, *Dallas, Texas*
C. B. Carpenter, *Boston, Massachusetts*
D. J. Charron, *Paris, France*
F. H. J. Claas, *Leiden, The Netherlands*
P. Cresswell, *New Haven, Connecticut*
M. Crumpton, *London, England*
S. Curtoni, *Torino, Italy*
R. Dawkins, *Perth, Australia*
L. Degos, *Paris, France*
R. J. Duquesnoy, *Pittsburgh, Pennsylvania*
D. D. Eckels, *Milwaukee, Wisconsin*
C. P. Engelfriet, *Amsterdam, The Netherlands*
H. A. Erlich, *Emeryville, California*
G. B. Ferrara, *Genoa, Italy*
T. C. Fuller, *Salt Lake City, Utah*
J. Gorski, *Milwaukee, Wisconsin*
F. C. Grumet, *Stanford, California*
J. A. Hansen, *Seattle, Washington*
G. A. Hitman, *London, England*
C. K. Hurley, *Washington, DC*
W. R. Mayr, *Vienna, Austria*
A. McMichael, *Oxford, England*
T. Mohanakumar, *St. Louis, Missouri*
E. Moller, *Stockholm, Sweden*
H. T. Orr, *Minneapolis, Minnesota*
P. Parham, *Stanford, California*
P. A. Peterson, *La Jolla, California*
H. L. Ploegh, *Cambridge, Massachusetts*
S. Radka, *Tarrytown, New York*
N. Reinsmoen, *Minneapolis, Minnesota*
M. A. Robinson, *Rockville, Maryland*
G. E. Rodey, *Atlanta, Georgia*
P. Rubinstein, *New York, New York*
F. Sanfilippo, *Baltimore, Maryland*
T. Sasazuki, *Tokyo, Japan*
D. J. Schendel, *Munich, Germany*
M. Schlesinger, *Jerusalem, Israel*
B. D. Schwartz, *St. Louis, Missouri*
S. Serjeantson, *Canberra, Australia*
S. Shaw, *Bethesda, Maryland*
P. Stastny, *Dallas, Texas*
A. Svejgaard, *Copenhagen, Denmark*
E. Thorsby, *Oslo, Norway*
R. Tosi, *Rome, Italy*
J. Trowsdale, *London, England*
K. Tsuji, *Isehara, Japan*
J. A. (Falk) Wade, *Toronto, Canada*
L. R. Weitkamp, *Rochester, New York*
E. J. Yunis, *Boston, Massachusetts*

# Human Immunology

## Volume 36 Contents

### Number 1, January 1993

ULF B. GYLLENSTEN and HENRY A. ERLICH
MHC Class II Haplotypes and Linkage Disequilibrium in Primates 1

ALLEN D. KIRK, SHERIF IBRAHIM, DEBORAH V. DAWSON, FRED SANFILIPPO, and OLIVERA J. FINN
Characterization of T Cells Expressing the γ/δ Antigen Receptor in Human Renal Allografts 11

S. YOON CHOO, GARY C. STARLING, CLAUDIO ANASETTI, and JOHN A. HANSEN
Selection of an Unrelated Donor for Marrow Transplantation Facilitated by the Molecular Characterization of a Novel HLA-A Allele 20

CARMELA PERFETTO, MICHELLE ZACHEIS, DAWN McDAID, JAMES W. MEADOR III, and BENJAMIN D. SCHWARTZ
Polymorphism in the Promoter Region of HLA-DRB Genes 27

MARTIN A. TURMAN, TOSHIO YABE, CYNTHIA McSHERRY, FRITZ H. BACH, and JEFFREY P. HOUCHINS
Characterization of a Novel Gene (*NKG7*) on Human Chromosome 19 That Is Expressed in Natural Killer Cells and T Cells 34

E. SERGIO CURTONI, Conference Chairman
Abstracts of the European Conference on Histocompatibility 1993 41

### Number 2, February 1993

JANE A. McCUTCHEON, KELLY D. SMITH, ALICIA VALENZUELA, KIMBERLEY AALBERS, and CHARLES T. LUTZ
HLA-B*0702 Antibody Epitopes Are Affected Indirectly by Distant Antigen Residues 69

HITOSHI ANDO, YOSHIHISA MIYATA, HAJIME TAKATA, and HIDETOSHI INOKO
Identification of Alloantisera Reacting with HLA-C Blank (Cx52) Using a Mouse L-Cell Transfected with HLA-Cw*1201 Allele 76

BERTA SÁNCHEZ, OSCAR DE LA CALLE, JOSÉ YÉLAMOS, ISABEL AGUILERA, FLORENTINO SÁNCHEZ, VITALIA DESSI, SANDRO SIERVO, JOSÉ RAÚL GARCÍA-LOZANO, JOSEFA MELERO, ROSARIO MAGARIÑO, MARISA GARZÓN, and ANTONIO NÚÑEZ-ROLDÁN
A Human Monoclonal Antibody Reacting Against HLA-DQ1-, DQ4-, and a Subset of DQ7-Bearing Cells 81

NADEEM M. MIRZA, VALERIE RELIAS, EDMOND J. YUNIS, WILLIAM N. PACHAS, and JAI DEV DASGUPTA
Defective Signal Transduction Via T-Cell Receptor–CD3 Structure in T Cells from Rheumatoid Arthritis Patients 91

*Human Immunology* is cited in *Biological Abstracts, Chemical Abstracts, Current Contents (Life Sciences), Excerpta Medica, Index Medicus,* and *CABS/Current Awareness in Biological Sciences.*

SUVINA RATANACHAIYAVONG, LINDA LLOYD, CHRISTOPHER DARKE, and ALAN M. McGREGOR
MHC-Extended Haplotypes in Families of Patients with Graves' Disease 99

KAZUHITO SUGIMURA, HITOSHI ASAKURA, NOBUHISA MIZUKI, MAMORU INOUE, TOSHIHUMI HIBI, AKIKUNI YAGITA, KIMIYOSHI TSUJI, and HIDETOSHI INOKO
Analysis of Genes Within the HLA Region Affecting Susceptibility to Ulcerative Colitis 112

NOBUYUKI TANIGAKI, DORIANA FRUCI, ALBERTO CHERSI, and RICHARD H. BUTLER
Unfolded HLA Class I $\alpha$ Chains and Their Use in an Assay of HLA Class-I-Peptide Binding 119

RICHARD I. CRONKHITE, JOHN J. LOBICK, and JANET M. D. PLATE
Heterogeneity of Type-II Interleukin-1 Receptors: Heterogeneity of B-Cell Interleukin-1 Binding Created by Dimerization of Type-II Interleukein-1 Receptors 128

## Number 3, March 1993

KRISTIN LIENERT, RAVI KRISHNAN, CRAIG FOWLER, and GRAEME RUSS
HLA DPB1 Genotyping in Australian Aborigines by Amplified Fragment Length Polymorphism Analysis 137

SUSAN MASEWICZ, JEFFREY A. LEDBETTER, PAUL MARTIN, ERIC MICKELSON, JOHN A. HANSEN, and NIELS ØDUM
Inhibition of Allostimulated HLA-DQ and DP-Specific T Cells by Staphylococcal Enterotoxin A 142

PAMELA K. WESLEY, CAROL CLAYBERGER, SHU-CHEN LYU, and ALAN M. KRENSKY
The CD8 Coreceptor Interaction with the $\alpha_3$ Domain of HLA Class I Is Critical to the Differentiation of Human Cytotoxic T-Lymphocytes Specific for HLA-A2 and HLA-Cw4 149

FIORELLA PETRONZELLI, GIUSEPPE MULTARI, PAOLA FERRANTE, MARGHERITA BONAMICO, GABRIELLA RABUFFO, LILIANA CAMPEA, and MARIA CRISTINA MAZZILLI
Different Dose Effect of HLA-DQ$\alpha\beta$ Heterodimers in Insulin-Dependent Diabetes Mellitus and Celiac Disease Susceptibility 156

FUMIYA OBATA, MISAO TSUNODA, KOICHI ITO, ICHIRO ITO, TAKEHISA KANEKO, GRAHAM PAWELEC, and NOBORU KASHIWAGI
A Single Universal Primer for the T-Cell Receptor (TCR) Variable Genes Enables Enzymatic Amplification and Direct Sequencing of TCR$\beta$ cDNA of Various T-Cell Clones 163

JUN GE and KRISTIAN HANNESTAD
A Cytotoxic Human Hybridoma Monoclonal Antibody (TrJ5) Specific for HLA-B38(16) and -B39(16) 168

DJAMAL BENMAMAR, JORGE MARTINEZ-LASO, PILAR VARELA, FOUZIA BEKHOUCHA, PABLO MORALES, and ANTONIO ARNAIZ-VILLENA
Evolutionary Relationships of HLA-DR8 Alleles and Description of a New Subtype (DRB1*0806) in the Algerian Population 172

MICHEL LAFORET, ARLETTE URLACHER, ANNIE FALKENRODT, BRUNO LIOURE, ANNE PARISSIADIS, and MARIE M. TONGIO
A New DR14 Allele (DRB1*1411) Containing a Short DR11 Sequence and Its Haplotypic Association 179

AREND MULDER, MARRIE KARDOL, JOKE BLOM, WELDON B. JOLLEY, CORNELIS J. M. MELIEF, and JOHAN W. BRUNING
Characterization of Two Human Monoclonal Antibodies Reactive with HLA-B12 and HLA-B60, Respectively, Raised by in vitro Secondary Immunization of Peripheral Blood Lymphocytes 186

GO KAWAGUCHI, NORIKO KATO, KOUICHI KASHIWASE, SACHIKO KARAKI, TAKEO KOHSAKA, TATSUYA AKAZA, KYOICHI KANO, and MASAFUMI TAKIGUCHI
Structural Analysis of HLA-B40 Epitopes 193

Brief Communication
MINCHUN CHEN, WINFRIED MAERZ, BURKHARD J. MANFRAS, PETER KUEHNL, KLAUS HENNING USADEL, and BERNHARD OTTO BOEHM
Rapid and Simple Subtyping of the HLA-DRB3 Gene in Graves' Disease by Using Temperature-Gradient Gel Electrophoresis 199

## Number 4, April 1993

MARCEL KENTER, NEL OTTING, MICHEL DE WEERS, JACQUELINE ANHOLTS, CHRISTIAN REITER, MAGREET JONKER, and RONALD E. BONTROP
*Mhc-DRB* and *-DQA1* Nucleotide Sequences of Three Lowland Gorillas: Implications for the Evolution of Primate *Mhc* Class II Haplotypes 205

GERALDINE MILLER, GERALD T. NEPOM, MARTHA B. REICH, and JAMES W. THOMAS
Autoreactive T Cells from a Type I Diabetic Recognize Multiple Class II Products 219

RAGHAD KOUTOUBY, CAROL ZUCKER, KEITH ZUCKER, GEORGE BURKE, JOSE NERY, DAVID ROTH, VIOLET ESQUENAZI, and JOSHUA MILLER
Molecular Monitoring of the Immunosuppressive Effects of Cyclosporine in Renal Transplant Patients by Using a Quantitative Polymerase Chain Reaction 227

ANAT ROITBERG-TAMBUR, ADAM FRIEDMANN, CILLY SAFIRMAN, ALICE MARKITZIU, ELDAD BEN-CHETRIT, ALAN RUBINOW, HARALAMPOS M. MOUTSOPOULOS, EFTHYMOIS STAVROPOULOS, FOTINI N. SKOPOULI, HANAH MARGALIT, and CHAIM BRAUTBAR
Molecular Analysis of HLA Class II Genes in Primary Sjögren's Syndrome: A Study of Israeli Jewish and Greek Non-Jewish Patients 235

ANA M. LAZARO, MARCELO A. FERNANDEZ-VIÑA, ZIYING LIU, and PETER STASTNY
Enzyme-Linked DNA Oligotyping: A Practical Method for Clinical HLA-DNA Typing 243

JANET M. D. PLATE, WILLIAM H. KNOSPE, JULES E. HARRIS, and STEPHANIE A. GREGORY
Normal and Aberrant Expression of Cytokines in Neoplastic Cells from Chronic Lymphocytic Leukemias 249

TESSA PALKAMA and MIKKO HURME
Signal Transduction Mechanisms of HLA-DR-Mediated Interleukin-1$\beta$ Production in Human Monocytes: Role of Protein Kinase C and Tyrosine Kinase Activation 259

# 12th EUROPEAN IMMUNOLOGY MEETING (EFIS)

## BARCELONA 14-17 June 1994

*To receive preliminary program and registration form please write to:*

*12th European Immunology Meeting*
*Immunology Department*
*Hospital Clínic*
*Villarroel 170*
*08036 BARCELONA, Spain*
*Tel: 34-3-4544920 # FAX: 34-3-4518038*

*Abstract submission deadline: 1st-February-1994*